Class Title: Water Chemist

BRIEF DESCRIPTION OF THE CLASSIFICATION:

Ensures water provided to all customers meets or exceeds state and federal regulations. Provides customer service to the citizens regarding water quality. Collects, tests and analyses water samples in the water treatment process. Supports various city agencies and divisions as required. Maintains various laboratory operations.

ESSENTIAL FUNCTIONS:

This information is intended to be descriptive of the key responsibilities of the classification. The following examples do not identify all duties performed by any single incumbent. Specific requirements of individual positions are described in the Job Description.

| | Physical Strength Code | ESSENTIAL FUNCTIONS |
|---|---------------------------|--|
| 1 | M | Generates data through sample analysis by maintaining instruments, establishing written \"standard operating procedure\" manuals, preparing various monthly and quarterly reports, evaluating data from plant operation, raw water, and distribution system, and calibrating all chemical feeders for plants to ensure accurate chemical dosages in water treatment. |
| 2 | Н | Supports various divisions including water production, distribution by calibrating and maintaining operators' lab equipment, preparing monthly reports, cross-training operators, troubleshooting treatment problems, determining chemical dosages, analyzing samples, preparing sample sites, and maintaining autosamplers. |
| 3 | Н | Collects water samples at various stages of treatment process and in the water distribution system. |
| 4 | L | Provides customer service to other departments, municipalities, and area residents by tracking complaints by computer, offering solutions to issues, and locating resolutions to various problems. |
| 5 | M | Performs necessary quality control to maintain laboratory certification by purchasing lab supplies and equipment, maintaining hazardous waste and chemical hygiene programs, participating in safety programs, preparing and stocking reagents and supplies for operators' labs, and making graphs and charts for operators. |
| 6 | M | Participates in special projects by maintaining equipment, completing data entry, preparing samples, and conducting analyses. |

Classified Service Page 1 of 4 Pages

CLASS REQUIREMENTS:

| | CLASS REQUIREMENTS |
|---|--|
| Formal Education / Knowledge | Work requires broad knowledge in a general professional or technical field. Knowledge is normally acquired through four years of college resulting in a Bachelor's degree or equivalent. |
| Experience | Six months in the water treatment field. |
| Certifications and Other Requirements | Valid Driver's License |
| Reading | Work requires the ability to read technical journals, federal regulations, manuals, letters, memorandum, and general correspondence. |
| Math | Work requires the ability to perform general math calculations such as addition, subtraction, multiplication and division, as well as some statistical and algebraic calculations. |
| Writing | Work requires the ability to write letters, technical reports, standard operating procedures, memorandum, and general correspondence. |
| Managerial | Managerial responsibilities include regulating sample collection, managing supply inventory, and scheduling special research projects. |
| Budget Responsibility | N/A |
| Supervisory / Organizational Control | Job has no responsibility for the direction or supervision of others. |
| Complexity | Work is governed by broad instructions, objectives, and policies. Work requires the exercise of considerable initiative and independent analytical and evaluative judgment. |
| Interpersonal / Human Relations Skills | Contacts others within the organization. These contacts may involve similar work units or departments within the City which may be involved in decision making or providing approval for purchases or projects. Works with individuals outside the City who may belong to professional or peer organizations. Working with various state and federal agencies may also be required. Vendors and suppliers may also be called upon for information on purchases, supplies or products. Meetings and discussions may be conducted with customers, brokers and sales representatives. |

Classified Service Page 2 of 4 Pages

OVERALL PHYSICAL STRENGTH DEMANDS:

| Sedentary | Light | Medium X | Heavy | Very Heavy |
|--|--|--|---|--|
| S = Sedentary Exerting up to 10 lbs. occasionally or negligible weights frequently; sitting most of the time | L = Light Exerting up to 20 lbs. occasionally, 10 lbs. frequently, or negligible amounts constantly OR requires walking or standing to a significant degree. | M = Medium Exerting 20-50 lbs. occasionally, 10-25 lbs. frequently, or up to 10 lbs. constantly. | H = Heavy Exerting 50-100 lbs. occasionally, 25-50 lbs. frequently, or up to 10-20 lbs. constantly. | VH = Very Heavy Exerting over 100 lbs. occasionally, 50-100 lbs. frequently, or up to 20-50 lbs. constantly. |

PHYSICAL DEMANDS:

| C = Continuously | F = Frequently | O = Occasionally | R = Rarely | N = Never |
|--------------------------|----------------------------------|------------------------|----------------------------|---------------|
| 2/3 or more of the time. | From $1/3$ to $2/3$ of the time. | Up to 1/3 of the time. | Less than 1 hour per week. | Never occurs. |

This is a description of the way the job is currently performed; it does not address the potential for accommodation.

| PHYSICAL DEMANDS | FREQUENCY CODE | DESCRIPTION |
|---------------------|-------------------|---|
| Standing | F | Performing tests, collecting samples |
| Sitting | F | Computer, desk work, driving |
| Walking | F | Collecting samples |
| Lifting | О | Laboratory equipment, samples |
| Carrying | О | Laboratory equipment, samples |
| Pushing/Pulling | О | Gas tanks, equipment |
| Reaching | F | Laboratory equipment, samples |
| Handling | F | Laboratory equipment, samples |
| Fine Dexterity | F | Computer keyboard, writing, calculator, working with laboratory equipment |
| Kneeling | O | Collecting samples |
| Crouching | R | Collecting samples |
| Crawling | R | Collecting samples |
| Bending | F | Collecting samples |
| Twisting | О | Collecting samples |
| Climbing | R | Stairs, collecting samples |
| Balancing | R | On stairs |
| Vision | С | Collecting samples, performing tests, computer, desk work, driving |
| Hearing | С | Communicating with personnel and general public, on the telephone |
| Talking | F | Communicating with personnel and general public, on the telephone |
| Foot Controls | О | Driving |
| Other (specify) | N | |

Classified Service Page 3 of 4 Pages

MACHINES, TOOLS, EQUIPMENT, AND WORK AIDS:

pH meter, ISE meter, turbidimeter, balances, Lachat, AE autoanalyzer, spectrophotometer, colorimeter, burette, Ion chromatographs, distillers, deionization units, autoclaves, various analyzers, general office supplies, copy machine, fax machine, computer and related software, printers, gas chromatographs, atomic absorption instrumentation

ENVIRONMENTAL FACTORS:

| D = Daily | W = Several | M = Several | S = Seasonally | N = Never |
|-----------|----------------|-----------------|----------------|-----------|
| | Times Per Week | Times Per Month | | |

| HEALTH AND SAFETY | | ENVIRONMENTAL FACTO | RS |
|--------------------------|---|---------------------------|----|
| Mechanical Hazards | M | Dirt and Dust | M |
| Chemical Hazards | D | Extreme Temperatures | M |
| Electrical Hazards | S | Noise and Vibration | D |
| Fire Hazards | D | Fumes and Odors | D |
| Explosives | M | Wetness/Humidity | W |
| Communicable Diseases | D | Darkness or Poor Lighting | N |
| Physical Danger or Abuse | M | | |
| Other (see 1 below) | N | | |

| PRIMARY WORK LOCA | TION |
|---------------------|------|
| Office Environment | |
| Warehouse | |
| Shop | |
| Vehicle | |
| Outdoors | |
| Other (see 2 below) | X |

PROTECTIVE EQUIPMENT REQUIRED:

Goggles, respirator, gloves, hearing protection, lab coat, hard hat

NON-PHYSICAL DEMANDS:

| C = Continuously | F = Frequently | O = Occasionally | R = Rarely | N = Never |
|--------------------------|----------------------------------|--------------------------|----------------------------|---------------|
| 2/3 or more of the time. | From $1/3$ to $2/3$ of the time. | Up to $1/3$ of the time. | Less than 1 hour per week. | Never occurs. |

| NON-PHYSICAL DEMANDS | |
|---|---|
| Time Pressures | O |
| Emergency Situations | R |
| Frequent Change of Tasks | F |
| Irregular Work Schedule/Overtime | О |
| Performing Multiple Tasks Simultaneously | F |
| Working Closely with Others as Part of a Team | F |
| Tedious or Exacting Work | F |
| Noisy/Distracting Environment | F |
| Other (see 3 below) | N |

(3)

Classified Service Page 4 of 4 Pages

 $[\]overline{(1)}$

⁽²⁾ Laboratory